REMARKS

Enclosed herewith in full compliance with 37 C.F.R. §§1.821-1.825 is a Substitute Sequence Listing to be inserted into the specification as indicated above. The Substitute Sequence Listing in no way introduces new matter into the specification. Also submitted herewith in full compliance with 37 C.F.R. §§1.821-1.825 is a disk copy of the Substitute Sequence Listing. The disk copy of the Substitute Sequence Listing, file "2007-05-20 3691-0132PUS1 txt", is identical to the paper copy, except that it lacks formatting. In no way does the paper copy nor the disk copy of the Substitute Sequence Listing introduce new matter into the specification.

The specification is amended to properly identify the sequence disclosed in Fig. 5A with a sequence identification number (SEQ ID NO). The Sequence Listing is amended to identify the present application by filing date and serial number and to correct matters of form. In addition, more detailed descriptions regarding the source of the Artificial Sequences have been added in compliance with the USPTO sequence rules. These descriptions are based on information disclosed in the specification as filed and in no way introduce new matter into the application. No new matter is introduced by these amendments.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Monique T. Cole, Reg. No. 60,154 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

Docket No.: 3691-0132PUS1

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.14; particularly, extension of time fees.

Dated: MAY 3 0 2007

Respectfully submitted,

Gerald M. Murphy, Jr.

Registration No.: 28,977

BIRCH, STEWART, KOLASCH & BIRCH, LLP

8110 Gatehouse Road

Suite 100 East

P.O. Box 747

Falls Church, Virginia 22040-0747

(703) 205-8000

Attorney for Applicant

Attachments: Disk Copy of Substitute Sequence Listing

Paper Copy of Substitute Sequence Listing

Copy of Notification to Comply